



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Whatever may be our view of the position taken by Professor Rosenbusch upon certain mooted questions in petrology, we must acknowledge the great value of this recent work, and congratulate the author upon its publication.

J. P. I.

A Text Book of Mineralogy with an extended treatise on Crystallography and Physical Mineralogy, by E. S. DANA, New York, John Wiley & Sons, 1898.

This is a new edition of Professor Dana's former text-book entirely rewritten and enlarged. It consists of four parts devoted to crystallography, physical mineralogy, chemical mineralogy, and descriptive mineralogy, and contains an appendix treating of the drawing of crystal figures, and of projections, besides one giving tables to be used in the determination of minerals.

The relation of crystal form to other physical properties and to the probable molecular structure of crystals is set forth in the introductory paragraphs of Part I, and the grouping of the crystal forms is made in relation to the thirty-two classes of symmetry. For this reason it would seem that a more logical arrangement of the subject would place the physical mineralogy first and the crystallography afterwards.

The arrangement of the types of crystal forms although referred to the classes of symmetry is the order usually employed in elementary treatises, namely, the group with the most complex symmetry first. The necessity for this order of arrangement is questionable.

The treatment of the six crystallographic systems is quite full and in addition to the description of the symmetry and principal forms are given their spherical projection and the mathematical relations of each system. Compound or twin crystals and the irregularities of crystals are described at length and are profusely illustrated.

The physical characters of minerals are treated briefly in connection with those of cohesion, elasticity, and relative density, as well as those related to heat, electricity, and magnetism. The optical properties are considered at greater length, both as to the principles involved and their application to the optical investigation of minerals. In this respect the improvement over former editions of the Text Book is marked. The part devoted to chemical mineralogy includes a statement of the general principles of chemistry which apply to minerals

and a brief description of methods of chemical examinations of minerals.

The descriptive mineralogy is an abridgment of the sixth edition of Professor Dana's System of Mineralogy and possesses most of the advantageous features of the larger work. However, much of the material of the latter work is necessarily excluded from a text-book.

Perhaps the most striking feature of the new edition of this Text Book of Mineralogy is the condensation of the material, a great amount of information being compassed by so few pages. Its adaptability for class instruction, however, has yet to be tested, and it is hoped that it will prove satisfactory. Its need has been long felt and Professor Dana is to be thanked for its preparation. It is regrettable that the figures used for illustration vary so greatly in merit. While most of them are excellent, some are quite defective or are poorly printed so that the lettering is obscure or the edges of crystals confused.

J. P. I.

Manual of Determinative Mineralogy with an introduction on Blowpipe Analysis, by GEORGE J. BRUSH. Revised and enlarged, with entirely new tables for the identification of minerals, by Samuel L. Penfield. Fifteenth edition. John Wiley & Sons, New York. Chapman & Hall, London, 1898.

In 1896 a revision of the introductory chapters of this book, relating to blowpipe analysis and the chemical reactions of the elements, was published, and was reviewed in this JOURNAL, Vol. V, p. 86. The character of the work published at that time was of so high an order as to raise expectations regarding the promised revision of the tables for the identification of minerals. These expectations have been fully satisfied by the present publication. The advancement of mineralogical knowledge since the tables were first arranged in 1874 by Professor Brush has necessitated their expansion and rearrangement and has permitted of their being rounded out into more perfect form. The new tables are not only almost double the length of those published two years ago, but are more complete in the amount of data furnished under each mineral species. And, while the number of species of minerals in the new tables is much larger than formerly, the student is saved from confusion by the printing of the commoner kinds in stronger type than that used for the rarer ones. There are frequent